

## BIBLIOGRAPHICAL NOTICE.

*European Animals: their Geological History and Geographical Distribution.* By R. F. SCHARFF, Ph.D., B.Sc. London: Constable & Co., 1907. Pp. viii, 258. 7s. 6d. net.

DR. SCHARFF has produced a book that will prove of exceeding value to all who are interested in the difficult problem of the geographical distribution of animals. He has brought together a mass of facts concerning both the plants and animals of Europe and their present-day distribution such as will be found in no other work of its kind, and herein he has earned the gratitude of us all.

In his interpretation of many of these facts, however, we venture to think the results of his labours are less satisfactory. And for this reason:—In his Introduction he insists, and rightly, on the importance of palæontological evidence in determining what must have been the centre of distribution for any given group or species; yet, almost in the same breath, he tells us that “our fossil evidence is of so fragmentary a character that it is often extremely difficult to point to any particular country as the home of a species or genus. The present distribution, however, may be looked upon as a reliable guide in directing our enquiries in this respect.” If this is true, why bother about geological evidence? And, as a matter of fact, Dr. Scharff does not, or at most regards it as auxiliary to the evidence afforded by living species; and therein he discounts the value of many of his conclusions.

Thus the present-day distribution of many of the species herein enumerated has to be accounted for by arguments that are far from convincing, in some cases, indeed, they break down completely. In the case of the common rabbit (*Oryctolagus cuniculus*), for example, Dr. Scharff endeavours to show, if we interpret him aright, that we must regard Spain as the land of its origin, from which centre of dispersal it eventually made its way along the S.W. coast of France to Ireland by a continuous land-connection. But since fossil remains of this animal have been found within the confines of Great Britain, this contention may be regarded as robbed of its probability. Spain and Portugal, according to Dr. Scharff, are to be regarded as having played the part of a very important centre of distribution in past times, both of plants and animals. Rather, it would seem, they should be regarded as backwaters which have served as isolation-areas.

Similarly, in describing the distribution of beavers over Europe, he writes: “We have here an example of an animal which evidently spread westward from the east, since it has never been found fossil in either Ireland, Italy, or Spain, where we should have expected it to occur if it had originated in the west.” As a matter of fact, more remains of beavers—and from different horizons—have been found in Italy than in any other part of Europe. That it will be found in Spain is highly probable, for during the Pleistocene period this animal had a remarkably wide range.

The author, too, appears to hold views as to the fixity of mammalian species which are not generally shared, as he speaks more than once of species now living which crossed into this or that area during *Miocene* times. Yet it is surely generally conceded that no existing species extended so far back in time.

Instances of this kind could be multiplied, but we feel that it would savour too much of ingratitude to dwell on the blemishes of these pages; for, despite of them, Dr. Scharff's book is one that all must read, and all will find of very real value, inasmuch as it embraces within its scope Invertebrates as well as Vertebrates, and not a few of the more interesting plants. Moreover, the pages of the work are copiously illustrated. Maps are plentifully distributed, and each map has an "inset" figure of the animal to which it refers. If the defects to which we have referred are made good in a second edition, which in all probability will be demanded, this book will form one of the most admirable treatises on the subject which has ever appeared.

W. P. P.

#### MISCELLANEOUS.

*The Name Archæocidaris.* By J. W. GREGORY.

IN the *Ann. & Mag. Nat. Hist.* for November 1907, Dr. Bather advocates the substitution of the name *Echinocrinus* for the well-known and appropriate name *Archæocidaris*. This change seems unnecessary, and it will probably be admitted by all students of Echinoderms as undesirable unless absolutely necessary. The name *Echinocrinus* is misleading, as it is admitted that it was given by Agassiz under the mistaken idea that the fossils which he thus named were crinoids. No one would take the responsibility of overthrowing a well-established name because it happens to assert a wrong affinity for the genus; but when a truthful name has been well established, it is deplorable to resuscitate a misleading term from which we have been saved by the common-sense of an earlier generation.

In this case there is a sound excuse for allowing the discarded name to remain buried, owing to its close resemblance to the earlier *Echinoencrinus*. *Archæocidaris* is probably more common in the Carboniferous rocks of the west of Scotland than in any other part of the British Isles, and the name is therefore especially well known among Scotch palæontologists. Professor Bell (in the 'Annals' for 1891, ser. 6, vol. viii. pp. 106-9) showed that, according to the strict rules of priority, *Actinia* is the name of a Holothurian and that *Holothuria* is an Ascidian. That fact was pointed out sixteen years ago, but the old use of the names continues in defiance of the rules. Until these changes are accepted I hope palæontologists will retain the name *Archæocidaris*.

University, Glasgow.